What Have We Found? The Alaska EPMT: 2003 thru 2011

Alaska Exotic Plant Management Team Liaison bonnie_million@nps.gov

907-644-3452

U.S. Department of the Interior

National Park Service

Alaska Region

CAPE KRUSENSTERN

Unit Size: 0.65 million acres Inventoried Area: 215.656 acres Infested Area: 0.0001 acres or 0% of inventoried Treated Area: 0.00002 acres or 18% of infested Eradicated Area: 0 acres

Number of Invasive Species: 3 (all in Kotzebue)

Most Prevalent Species: 1) common dandelion 0.0001 acres 2) pineappleweed 0.0001 acres 3) flixweed 0.00001 acres

Highest Ranked Species: 1) common dandelion 0.0001 acres

2) flixweed 0.00001 acres 3) pineappleweed 0.0001 acres

BERING LAND BRIDGE

Unit Size: 2.78 million acres **Inventoried Area:** 4.296 acres Infested Area: 0 acres or 0% of inventoried Treated Area: 0 acres Eradicated Area: 0 acres **Number of Invasive Species:** 0



Unit Size: 8.47 million acres **Inventoried Area:** 638 acres Infested Area: 0.06 acres or 0.009% of inventoried 2) common plantain 0.04 acres Treated Area: 0.02 acres or 29.1% of infested Eradicated Area: 0 acres **Number of Invasive Species: 4**

Most Prevalent Species:

1) foxtail barley 0.04 acres 3) common dandelion 0.02 acres 4) narrowleaf hawksbeard 0.02 acres

Highest Ranked Species:

1) foxtail barley 0.04 acres 2) common dandelion 0.02 acres 3) narrowleaf hawksbeard 0.02 acres 4) common plantain 0.04 acres

YUKON-CHARLEY

Unit Size: 2.52 million acres Inventoried Area: 197.5 acres Infested Area: 53.1 acres or 26.9% of inventoried Treated Area: 2.3 acres or 4.2 % of infested Eradicated Area: 0 acres or 0% of infested **Number of Invasive Species: 17**

Most Prevalent Species:

1) common plantain 52.8 acres 2) pineappleweed 20.0 acres 3) common dandelion 18.0 acres 4) alsike clover 7.8 acres

5) common lambsquarters 6.3 acres

Highest Ranked Species: 1) bird vetch 0.6 acres 2) foxtail barley 2.0 acres 3) smooth brome 0.06 acres

4) quackgrass 0.01 acres

5) common dandelion 18.0 acres

DENALI

Unit Size: 6.03 million acres Inventoried Area: 965.8 acres Infested Area: 328.7 acres or 34% of inventoried Treated Area: 124.8 acres or 38.0% of infested Eradicated Area: 0.3 acres or 0.2% of infested **Number of Invasive Species: 36**

Most Prevalent Species:

1) common dandelion 279.9 acres 2) white sweetclover 41.2 acres

3) foxtail barley 41.1 acres

4) narrowleaf hawksbeard 34.0 acres 5) common plantain 18.3 acres

Highest Ranked Species:

1) white sweetclover 41.2 acres 2) Siberian peashrub 0.00001 acres 3) bird vetch 0.7 acres

4) bigleaf lupine 0.02 acres 5) yellow toadflax 1.2 acres

Highest Ranked Species:

3) oxeye daisy 0.2 acres

4) white clover 1.5 acres

1) foxtail barley 0.007 acres

2) smooth brome 0.08 acres

5) common dandelion 10.4 acres

LAKE CLARK

Unit Size: 4.04 million acres

Most Prevalent Species:

Inventoried Area: 76.1 acres

Number of Invasive Species: 14

1) pineappleweed 17.6 acres

3) common dandelion 10.4 acres

4) common plantain 7.1 acres

5) common chickweed 5.5 acres

2) common lambsquarters 11.2 acres

Infested Area: 22.5 acres or 29.5% of inventoried

Treated Area: 1.1 acres or 5.0% of infested

Eradicated Area: 0 acres or 0.0% of infested

Unit Size: 13.18 million acres Inventoried Area: 3,592.2 acres Infested Area: 2,387.0 acres or 66.4% of inventoried

Treated Area: 95.6 acres or 4.0% of infested Eradicated Area: 0.4 acres or 0.02% of infested

Most Prevalent Species:

Number of Invasive Species: 43

1) white sweetclover 1,564.0 acres 2) common dandelion 505.9 acres

3) common plantain 275.4 acres

4) pineappleweed 243.0 acres 5) foxtail barley 239.0 acres

Highest Ranked Species:

1) white sweetclover 1,564.0 acres 2) Siberian peashrub 0.03 acres

3) bird vetch 4.1 acres

4) yellow sweetclover 0.05 acres

5) yellow toadflax 0.01 acres

GLACIER BAY

Unit Size: 3.28 million acres **Inventoried Area:** 3,157.5 acres Infested Area: 1,215.2 acres or 38.5% of inventoried Treated Area: 50.8 acres or 4.2% of infested

Eradicated Area: 24.9 acres or 2.0% of infested

Number of Invasive Species: 57

Program Summary

The Alaska Exotic Plant Management Team (EPMT) was first formed in 2003 and provides invasive plant management assistance and expertise to the 16 parks and over 52.8 million acres of National Park Service (NPS) managed lands in Alaska. This team is unique in the EPMT program as most partner parks have limited invasive plant infestations, occurring primarily in front country areas, around visitor centers, trailheads, or roadsides, and management efforts are focused on Early Detection Rapid Response.

The geography of Alaska parks, however, make this management strategy more difficult than in the lower 48 as most areas have little or no road access; multiple dispersed backcountry uses through concessionaires, airstrips, and public use cabins; and expensive travel costs, in some cases to simply arrive at a park boundary.

Due mainly to the high cost of travel in Alaska, this team is organized to try and take advantage of the limited amount of funding available by having seasonal or intern staff members stationed at eight parks across the region. Since these staff have a smaller area to focus on, instead of the region as a whole, they are able to make the most of the short Alaskan summer through a great deal of assistance from their host parks, better identification and familiarity of local flora, and the ability to more efficiently access backcountry areas.

During 2011 season the Alaska EPMT crews surveyed over 730 species acres and treated over 101 acres, including 8 acres of herbicide treatment. Overall, the program has mapped over 9,526 acres for invasive plants. Of this 44% supports at least one non-native species – an increase of almost a full percent from 2010 numbers.

Inventoried Area: 9,526.8 acres

Infested Area: 4,237.2 acres or 44.5% of inventoried Treated Area: 340.9 acres or 8.0% of infested Eradicated Area: 78.4 acres or 2.1% of infested

Number of Invasive Species: 96

Most Prevalent Species:

1) common dandelion

2) white sweetclover

3) common plantain

4) mouse-ear chickweed

5) pineappleweed

Highest Ranked Species: 1) Japanese knotweed

2) reed canarygrass

3) ornamental jewelweed

4) white sweetclover

5) orange hawkweed

KLONDIKE GOLD RUSH

Unit Size: 12,992 acres Inventoried Area: 353.5 acres Infested Area: 159.3 acres or 45.1% of inventoried Treated Area: 35.8 acres

or 22.4% of infested Eradicated Area: 0.6 acres or 0.5% of infested Number of Invasive Species: 48

Most Prevalent Species: 1) common dandelion 110.0 acres 2) white clover 66.3 acres

3) common sheep sorrel 56.6 acres 4) common plantain 36.3 acres 5) narrowleaf hawksbeard 28.4 acres

Highest Ranked Species:

1) reed canarygrass 0.4 acres 2) ornamental jewelweed 0.1 acres 3) white sweetclover 18.6 acres

5) perennial sowthistle 5.4 acres

4) Canada thistle 0.6 acres

Most Prevalent Species: 1) creeping buttercup 19.5 acres 2) common dandelion 14.9 acres

3) European mtn-ash 12.6 acres 4) white clover 8.2 acres 5) mouse-ear chickweed 6.8 acres

Highest Ranked Species:

1) Japanese knotweed 0.9 acres 2) reed canarygrass 1.6 acres 3) rugosa rose 0.1 acres

KENAI FJORDS

Unit Size: 0.67 million acres **Inventoried Area:** 136.1 acres Infested Area: 32.3 acres or 23.7% of inventoried Treated Area: 17.7 acres or 54.7% of infested Eradicated Area: 0.4 acres or 0.2% of infested **Number of Invasive Species: 23**

Most Prevalent Species:

1) common dandelion 30.5 acres 2) common plantain 2.2 acres 3) annual bluegrass 1.1 acres 4) black medic 0.5 acres 5) white clover 0.3 acres

Highest Ranked Species:

3) yellow alfalfa 0.2 acres 4) foxtail barley 0.001 acres

1) bird vetch 0.003 acres

5) oxeye daisy 0.03 acres

2) yellow toadflax 0.1 acres

Highest Ranked Species:

2) orange hawkweed 0.3 acres 3) Canada thistle 0.8 acres 4) perennial sowthistle 2.4 acres 5) rugosa rose 0.4 acres

Most Prevalent Species:

2) bigleaf lupine 395.1 acres

5) white clover 145.5 acres

4) common plantain 321.9 acres

1) common dandelion 931.0 acres

3) mouse-ear chickweed 362.2 acres

1) reed canarygrass 29.4 acres

Unit Size: 112 acres

Inventoried Area: 28.800 acres Infested Area: 23.194 acres or 80.5% of inventoried Treated Area: 6.445 acres or or 27.8% of infested Eradicated Area: 0.103 acres

or 0.5% of infested Number of Invasive Species: 28

4) yellow toadflax 0.5 acres 5) oxeye daisy 1.6 acres

Albers Equal Area Projects; NAD83

= No Invasive Species

SAGA crewmembers celebrate after a productive day pulling

weeds with the Alaska EPMT at Yukon-Charley National Preserve

Invasive species know no boundary and the Alaska

EPMT works with multiple

infestations are attacked or

Southeast Alaska Guidance

Conservation Association,

Youth Conservation Corps

Inlet Watershed Council,

Copper River Watershed

Association, US Forest

Project, Bristol Bay Native

Service, US Fish & Wildlife

Service, Bureau of Land

Management,

Conservation Alliance, Taiva

Association, Student

Resurrection Bay

Mapped Areas : Invasive Species

Created: 10/2011 from AKEPMT NPS Permanent GIS Dataset Acreages represent a gross coverage of the area and includes NPS and non-NPS managed areas in and around NPS units.

KATMAI

Unit Size: 4.10 million acres

Inventoried Area: 161.3 acres

Number of Invasive Species: 26

1) common dandelion 6.5 acres

3) shepherd's purse 3.2 acres

4) pineappleweed 3.1 acres

5) fall dandelion 1.8 acre

2) common sheep sorrel 3.5 acres

Most Prevalent Species:

Infested Area: 15.8 acres or 9.8% of inventoried

Treated Area: 6.5 acres or 41.0% of infested

Eradicated Area: 0 acres or 0% of infested

Unit Size: 0.6 million acres

Inventoried Area: 0.01 acres Infested Area: 0.01 acres or 100% of inventoried Treated Area: 0 acres Eradicated Area: 0 acres Number of Invasive Species: 1

Most Prevalent Species: Highest Ranked Species: 1) common dandelion 0.01 acres 1) common dandelion 0.01 acres

Highest Ranked Species?

3) foxtail barley 0.3 acres

5) oxeye daisy 0.2 acres

4) smooth brome 0.2 acres

2) bird vetch 0.1 acres

1) Siberian peashrub 0.1 acres